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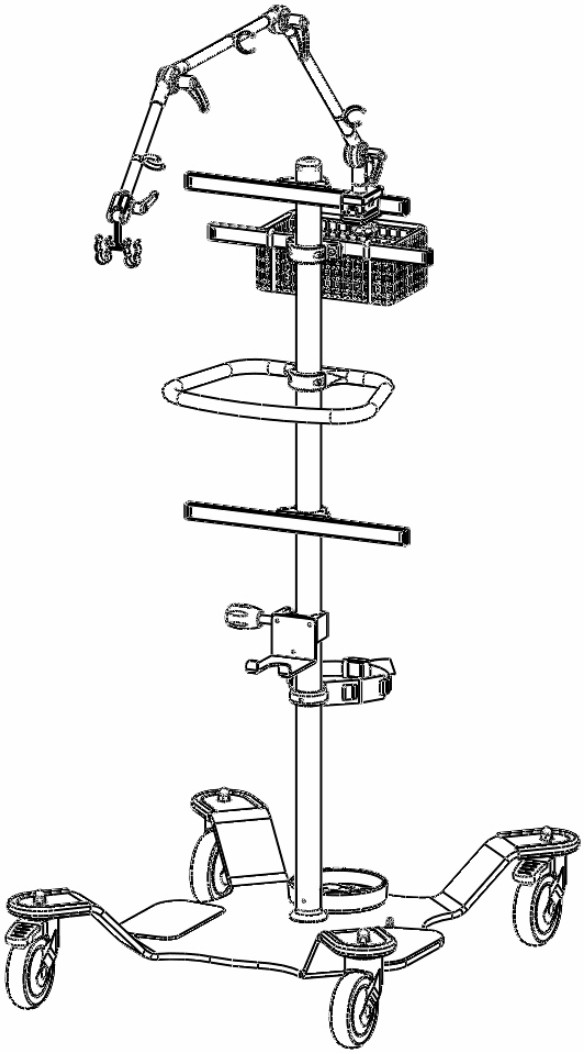
medical technology

General description and user manual



Clinic cart MEDUcart WM 28780

Contents

1. Safe use 2
1.1 User information 2
1.2 Warranty information 2
1.3 Checking the delivery 2
1.4 Icons on the equipment or in this user manual 2
2. Area of application and operating conditions 3
3. Intended use 3
4. Obvious misuses 3
5. Safery notes 4
5.1 Additional safety notes 5
6. Specification of the equipment and spare parts 6
7. Delivery, setup 7
7.1 Putting into operation 7
8. Dysfunctions 8
9. Cleaning and disinfection 9
9.1 Notes 9
10. Maintenance / repair 10
10.1 Maintenance 10
10.2 Repairs 10
10.3 Spare parts 10
10.4 Disposal 10
11. Technical data / environment / marking / service address 11
11.1 Maximum effective and functional dimensions 11
11.2 Ambient temperatures: 11
11.3 Classification Class I 11
11.4 Marking 11
11.5 Applied directives and standards 11
12. Exclusive distribution 12

1. Safe use

For your own and your patients' safety, please note the following:

1.1 User information

This manual is intended for medical personnel and the user. Make sure you have read the manual and understand how to handle the equipment. This manual is part of the equipment and should be kept close to the equipment at all times.

1.2 Warranty information

The manufacturer takes responsibility for the equipment's safety, reliability, and serviceability only if original components/spare parts are used, and if the equipment is repaired, without exception, by personnel duly authorised by the manufacturer. The spare parts and ancillary components listed on page 6 of this manual have to be replaced and/or fitted by qualified personnel.

The legal warranty period according to German law applies. Please contact your supplier in warranty cases. Persons assembling a medical electric system (including modified systems) are considered manufacturer of that system and are responsible for ensuring that all documents containing the necessary information for safe and reliable operation are attached:

- accompanying documents of all medical and non-medical electric devices,
- information on sterilisation and disinfection of all devices that are part of the system,
- a list of parts of a system that are suitable for use within the patient environment

Liability:
The manufacturer assumes no liability or warranty for any uses that are not in line with this user manual or the purpose of the equipment, or for the unauthorised use of non-original spare parts. The equipment may only be repaired by the manufacturer or qualified personnel using original components and observing the safety precautions that apply for medical electric devices.

1.3 Checking the delivery

After receipt of the equipment, check whether all components are included and are in good order and condition. Please contact your supplier should you have any complaints.

1.4 Icons on the equipment or in this user manual

The following icons are used on the equipment and/or this manual:

Manual must be observed

maximum load

CE sign according to Medical Devices Directive 93/42/EEC

Warning, Attention
Failure to comply means the risk of moderate to mild injuries
or damage to property and, in the worst case, serious or even fatal injuries.

Note
Gives additional information

2. Area of application and operating conditions

The MEDUcart clinic cart is intended for use or operation by qualified personnel in a responsible and controlled manner only! Qualified personnel means healthcare specialists or competent persons. The cart is intended for use in stationary operation in hospital/clinic buildings!
Before putting the cart into operation, ensure that it is placed on an even and level surface. In addition, make sure that the surface does not tilt or lose rigidity during operation.

Please park the cart only with brakes engaged!

3. Intended use

Ergonomic indoor supply of medical devices where they are needed. Mounting of medical equipment. Attachment of medical devices to mounting rails. The cart is not intended for use on patients, but may occasionally come in contact with patients for a short time.
The cart is designed to be used in combination with medical devices to fulfil or support the specified purpose of these devices.
The cart and accessories should only be used in accordance with the maximum allowable load for the cart.

4. Obvious misuses

- The cart may not be used for the transport of other loads or persons.
- The cart may not be used as a grounding conductor, to offset the ground potential, or as available ground potential.
- The cart is not intended for operation in vehicles.
- The cart is not intended for transport in passenger car boots.
- The cart may not be subjected to loads exceeding the maximum allowable load.
- The standard rails or other gadgets may not be used as a handle to move the cart.
- Devices are accumulator-powered also during patient transports!
- The cart may not be put into operation if there are any apparent deficiencies.
- The cart may not be modified without the manufacturer’s approval.

5. Safery notes

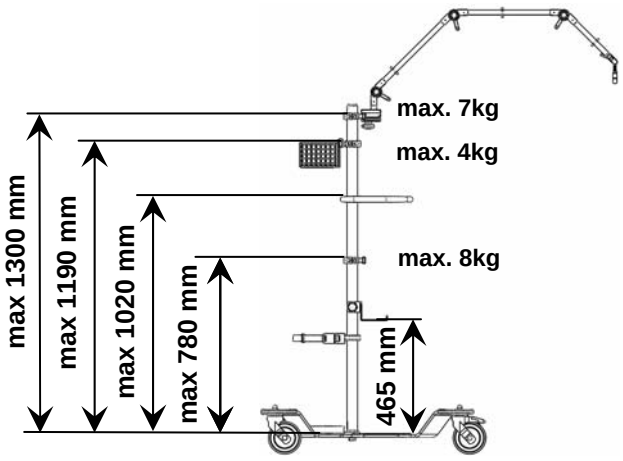
For your own and your patients' safety, please note the following:

Be sure to adhere to the operating instructions for the individual electric / electronic system components irrespective of this user manual! Please see the respective manufacturer's delivery notes and/or protocols and operating instructions for the exact technical data of the electric systems.

Warning: risk of tilting/overload!
The cart may tilt when subjected to improper loading!
The cart's safety against tilting has been tested and documented. Improper loading may lead to the specified values being overridden and the risk of instability.
Do not exceed the specified maximum allowable loads!

Risk of collision with persons or objects!

- Exercise particular caution when moving the cart. Use foresight to avoid collisions with persons and furniture.
- The cart may only be used or operated by duly instructed and qualified personnel in a responsible and controlled manner.
- It is to be used exclusively in in-hospital operation.
- During transport, all protruding accessories must be retracted and fastened.
- Before use, proper fastening of all components and devices should be thoroughly checked and corrected if necessary.
-



Warning: risk of personal damage!
Please note that the deadweight of the cart makes transport difficult. Ramps, ground beams or steps pose a risk to the **transporting persons** and all other **persons**. **The cart's deadweight may cause injury to these persons.**

Warning:
Risk of injury through protruding parts. Before use, please familiarise yourself with the cart's functionality and note the safety advices!

Look out for bumps:
If there are ground beams, steps e.g. nearby elevator entrances or other obstacles ahead, slow down so that the cart can be brought to a halt or manoeuvred out of the way anytime.

Note
Be sure to pay attention to the **setup notes**.

Warning, risk of infection! Observe hygiene guidelines!
The relevant hygiene rules must be observed to avoid infection or bacterial contamination.
. Always were gloves when working. Contaminated parts may jeopardise the patients' health.
Prior to the first use, the equipment must be conditioned in line with the hygiene guidelines.

Third-party products
Using equipment parts or ancillary components that are not in accordance with the original design described in this manual may affect the cart's function. Using equipment parts or ancillary components of unknown origin voids the manufacturer's warranty.

Warning, equipment defective!
Using non-original parts may result in personal or property damage or technical failure. Failure to comply with the user manual is at the operator's own responsibility and releases the manufacturer from all liability.

- Before each use, the cart must be checked for damage, safety-related defects, and firm attachment of all accessory parts.
- Damaged gadgets must be repaired by qualified personnel before the next use.
- All tool-based works have to be carried out by qualified personnel.
- Before moving the cart, all maximum effective dimensions (e.g. door height, door width, load carrying capacity of a lift, etc.) must be complied with; all adapted accessories are to be checked for functional integrity when the cart is moved.
- Never start moving the cart with components protruding beyond the effective dimensions. Ahead of floor beams, slants or steps, the speed should be reduced so that the cart can be brought to a halt at any time.
- Always keep a clear field of vision. Due to the risk of injury, moving the cart is not permitted if the field of vision is limited.
- Feed cables are to be fastened and/or guided so that no damage may occur.
- It is not permissible for feed cables to lie on the ground or be run over by the clinic cart.
- Ensure sufficient vision between devices and possible eye contact so that operators can communicate if necessary and do not endanger each other.
- All integrated components of the cart are to be installed firmly and safeguarded so that jolts during transport cannot cause them to fall down or come loose.

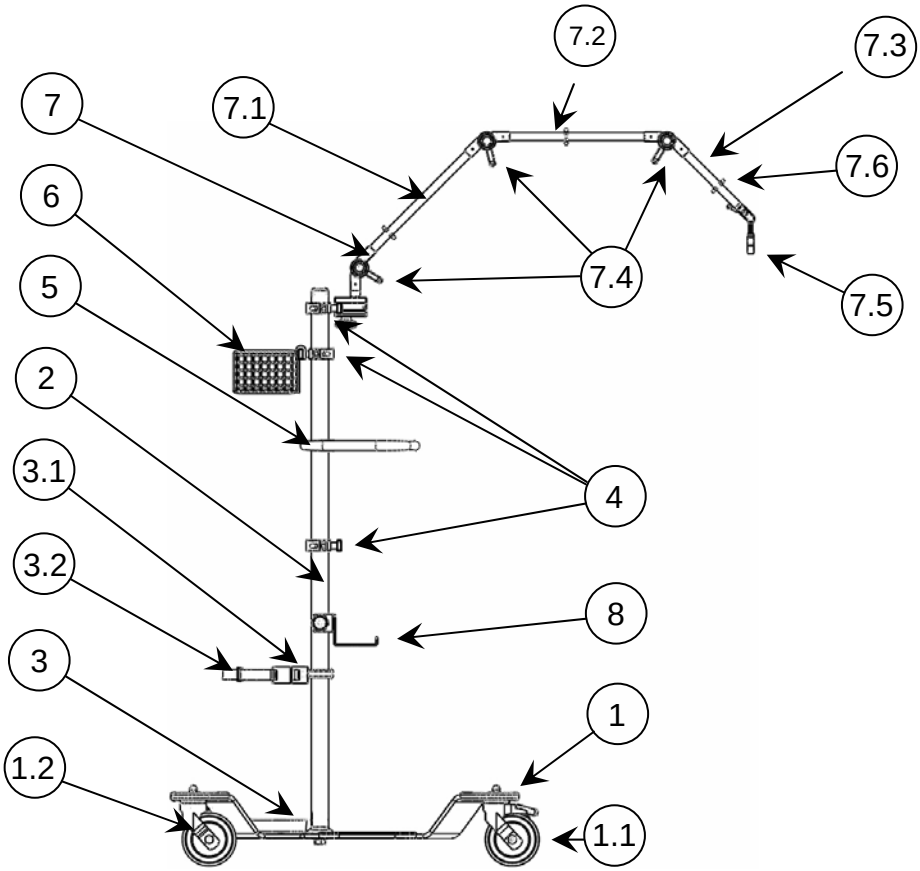
5.1 Additional safety notes

Before moving the cart or using it otherwise, the cart must be checked for proper functioning. All threaded joints and mechanical component parts must be inspected by qualified personnel for firm attachment and/or proper functioning on a regular basis, but at least at three-month intervals.

Also check the rollers' running characteristics. Filaments may settle between wheels and bolts with time. The running characteristics and safety will degrade markedly if the rollers are maintained poorly. Be sure to remove any changes or defects of the cart immediately; it must not be used in the case of defects. Please promptly contact the medical engineering department or other authorised personnel of your organisation for rectification of the defect.
Using the cart in transport vehicles such as ambulances or other automotive units is not permitted.
Warning

- All moving parts must be firmly locked in place
- All load-bearing connections must be screwed tightly
- Hanging parts (cables, hoses, etc.) must be securely fastened

6. Specification of the equipment and spare parts



Included in the delivery (basic set):		**Order no. of spare part:**	**per unit**
1.	Cart base including rollers		
1.1.	Roller with brake, electrically conducting (2 units)		WM 28782
1.2.	Roller without brake (2 units)		WM 28781
2.	Column Ø38mm		
3.	Cylinder support		
3.1.	Cylinder mounting complete		WM 28796
3.2.	Belt for cylinder mounting		WM 28785
4.	Mounting rail 25mm x 10mm x 400mm (3 units) incl. tension clip		WM 28783
5.	Handle complete		WM 28784
6.	Accessories basket		WM 28795

Optional equipment

7.	Articulated arm complete	WM 28786
7.1.	Articulated arm, lower segment complete	WM 28787
7.2.	Articulated arm, mid segment complete	WM 28788
7.3.	Articulated arm, upper segment complete	WM 28789
7.4.	Locking lever with cap nut and friction ring	WM 28791
7.5.	Double hose clamp	WM 28792
7.6.	Single hose clamp (1 packing unit = set of 3)	WM 28793
8.	Mounting for ULMER KOFFER I, II, III / RESCUE PACK including rod holder	WM 28794

7. Delivery, setup

The weight of the cart and the packaging dimensions depend on the configuration and the accessories provided.

Attention: The packaging material is not weatherproof!
Unpack the cart in a room with an even and sufficient clearance surface, check for completeness, and assemble according to the mounting instructions. Make sure that the screws of the mounting rail tension clips are tightened evenly and in parallel. The cart should not be put into operation before all notes on safety under item 5 have been considered.

Be sure that no hanging feed tubes, cables etc. can get trapped by rollers, as this may cause damage.

7.1 Putting into operation

1. Mounting for oxygen cylinder (3)
Install mounting on the rear side (above the cylinder support, see fig. page 4); height for 5l or 10l cylinders = right below the cylinder shoulder.

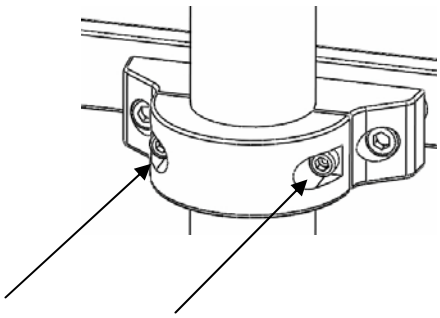
2. Mounting ULMER KOFFER I, II, III or RESCUE PACK incl. mounting rod set (8)
(only optionally)
Install mounting at a height of 465 mm (see fig. page 4) on the front using the rod holding element.

3. Lower mounting rail (4)
Attach on the front side at a maximum height of 780 mm (see fig. page 4); please see installation notes on page 8.
Rails can be used for:
- mounting of ACCUVAC Basic or ACCUVAC Rescue, consisting of
  wall holder (WM 15205), retaining plate (WM 15845), and
  mounting rail set incl. 2 adapters (WM 15805)
- holder for power supply unit and charger for MEDUMAT Transport, consisting of
  wall holder (WM 15846), retaining plate (WM 15845)
  mounting rail set incl. 1 adapter (WM 15795)
- holder for power supply unit and charger for ACCUVAC, consisting of
  wall holder (WM 15844), retaining plate (WM 15845)
  mounting rail set incl. 1 adapter (WM 15795)

4. Handle (5)
Attach at a maximum height of 1020 mm (see fig. on page 4) on the front side below the middle mounting rail; please see installation notes on page 8.

5. Middle mounting rail (4)
Attach on the rear side at a maximum height of 1190 mm (see fig. on page 4); please see installation notes on page 8.
The rails can be used for:
- accessories basket

6. Upper mounting rail (4)
Attach on the front side at a maximum height of 1,300mm (see fig. page 4); please see installation notes on page 8.
The rails can be used for
- MEDUMAT Transport
  a) on LIFE-BASE light or
  b) on LIFE-BASE 1 NG with wall holder BASE-STATION 1 NG,
  each with mounting rail set incl. 2 adapters (WM 15805)
- articulated arm complete (WM 28786)



To install the mounting rails, these screws must be untightened or tightened evenly. Use the same principle when untightening or tightening the handle.

8. Dysfunctions

The cart was comprehensively factory-tested for quality. However, dysfunctions may still occur when using the cart, which you might be able to correct on your own. The following hints (see table below) may be helpful:

Warning, equipment malfunctioning!
Using non-original parts may result in personal damage or malfunction. For this reason, only original spare parts should be installed.

Possible causes for dysfunction:

Dysfunction	Cause for dysfunction	Remedy
Cart cannot be moved	Roller brake is engaged	Disengage roller brake
	Rollers defective	Request original spare parts and have faulty components replaced by qualified personnel
	Cart roller faces an obstacle	Remove obstacle
Cart is tilting	Incorrect configuration of ancillary components	Install components properly
	Rollers defective	Request original spare parts and have faulty components replaced by qualified personnel
	Unsuitable ground	Make sure that the ground is solid and firm
	Overload due to excessive loading weight	Comply with maximum load specifications, remove additional devices or other non-permissible accessories
Mounting rails are turning or slipping	Threaded connection loose	Check threaded connection and correct if necessary
	Threaded connection defective	

If you are unable to remedy the defect yourself, you should contact the competent technical service of your area and, if necessary, put the cart out of action until the defect has been remedied.

9. Cleaning and disinfection

9.1 Notes

The individual components of the cart can be cleaned and disinfected according to the information given in the table below.
Please see the appropriate instructions manuals of the respective manufacturer for recommendations on how to clean the individual electric or electronic components.

Warning, electric shock!
Before each cleaning or disinfection process, any installed electric devices must be disconnected from the power supply to avoid the risk of electric shock.

Warning, risk of injury!
Disinfectants may contain noxious substances that cause injury upon contact with the skin and eyes. When using disinfectants, make sure to protect your skin and eyes and comply with the rules of hygiene.
When working with disinfectants, please pay attention to the directions of the manufacturer and hygiene specialist.

Warning, changes in the material!
Some of the cart's components are made of synthetics. Solvents and a number of disinfecting or cleaning agents may etch these synthetics or cause stress cracks. Therefore, do not use any agents containing hydrocarbons or alcohol when cleaning the surfaces.

Note
Using fading wipes may result in discoloration of the synthetic parts.

All mechanical components can be cleaned with agents in the pH range 4 - 8.5. Cleaning is done by way of wiping disinfection. Disinfection examples are recommendations of the manufacturer. Make exclusive use of products that conform with the lists of the German Society for Hygiene and Microbiology (DGHM) or VAH. For countries where these lists are unknown, the recommendation of the aforementioned active agents applies. That notwithstanding, the user should still be sure, in individual cases, to consult a hygiene specialist or test the components to be disinfected for compatibility with the agent used.

Parts	Cleaning	Disinfection	Rinse cycle in the rinsing machine	Hot steam sterilisation
Surfaces / components	moist wiping with mild rinsing solution moist wiping	spraying or wiping disinfection concentration and residence time specified by the disinfectant manufacturer to be observed For example: Antifect Liquid ready-to-use spraying solution; or Mikrozid AF Liquid ready-to-use spraying solution residence time 5 min.	not permissible	not permissible

10. Maintenance / repair

Warning, danger to health!
The cart is indirectly used in the treatment of patients. The unit or parts of it may therefore be contaminated after use. It has to be cleaned and disinfected before returning it for inspection or repair.

10.1 Maintenance

The cart and mountings are maintenance-free. However, do observe the timeline for periodic function checks and maintenance of the mounted equipment.
For notes on the maintenance of the individual gadgets, please see the appurtenant manuals from the respective manufacturers.
We recommend inspecting the product at six-month intervals to ensure operational safety, availability of all functions, and an enhanced life cycle. Inspections include a check of all threaded connections, the rollers, and potential damage to the surfaces. Operators are not required to carry out maintenance works that exceed the scope of general care. Inspections may be carried out by qualified personnel.

10.2 Repairs

Interventions by unauthorised persons will void any liability claims. Repairs may be carried out by qualified personnel only. When a defect is identified, the product may not be used any longer; please contact the service address in such cases.

The entire cart must be disinfected before sending it to the service shop! Failure to do so will result in the cart being sent back at a charge.

10.3 Spare parts

See description of the equipment and spare parts, item 6 page 6

10.4 Disposal

At the end of the product life cycle, the cart has to be properly disposed of. Make sure all materials are separated carefully. The cart does not contain any hazardous materials. Materials of the gadget components are fully recyclable. At the end of the cart's life cycle, Weinmann or the manufacturer will take it back at a charge.

Attention, disposal!
The cart or parts of it may be contaminated after use. Therefore, the equipment must be cleaned and disinfected before disposal.

This product is not covered by the EC Directive 2002/96/EC on waste electrical and electronic equipment. Please contact your authorised dealer to obtain more information on legal disposal. When disposing of this product outside the European Economic Area, the national provisions governing the disposal and handling of waste electric/electronic equipment apply.

11. Technical data / environment / marking / service address

11.1 Maximum effective and functional dimensions

kg

total effective height from floor:	**max.**	1,450mm
total effective width:	**max.**	700mm
total effective depth incl. accessories:	**max.**	830mm
total net load upper mounting rail	**max.**	7kg
total net load middle mounting rail	**max.**	4kg
total net load lower mounting rail	**max.**	8kg
total net load incl. accessories:	**max.**	50kg
deadweight:	**ca.**	19kg

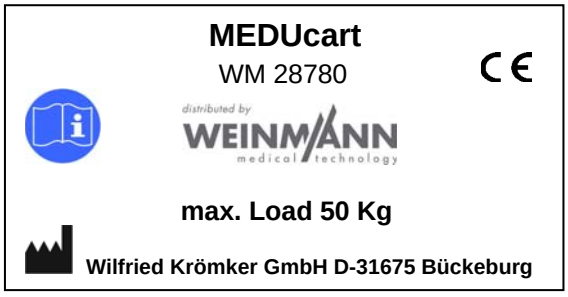
11.2 Ambient temperatures:

operation:	-18°C to +40°C
storage:	-20°C to +70°C
air humidity:	0 to 90% rel. humidity

11.3 Classification **Class I**

according to Directive	93/42/EEC Annex VII
UMDNS code:	15-208

11.4 Marking



11.5 Applied directives and standards

Directive 93/42/EEC

DIN EN ISO 14971
application of risk management to medical devices

DIN EN ISO 19054
rail systems for supporting medical equipment

DIN EN 60601-1
medical electrical equipment - part 1
general requirements for basic safety and essential performance

12. Exclusive distribution

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